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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,493	02/25/2004	Isidore I. Lamke	LUMA 7366C2	7305
1688	7590	10/27/2005	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			TON, ANABEL	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/787,493	LAMKE ET AL.	
	Examiner	Art Unit	
	Anabel M. Ton	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-2,6-10,15-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,739,733. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

- With regards to claim 1 of the instant invention, applicant recites the same structure as found in claims 1 and 18 of the '733 reference, except for the additional limitations in lines 58-62 of the '733 reference and the exception of the recitation of a plurality of extensions extending from a periphery of the board for attachment to a mold. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a plurality of extensions extending from a periphery of the circuit board for attachment to a mold, since

the flowable material of the '733 reference would require a mold for forming the flowable material in a desired shape and means for holding the mold in place while the material cures. The limitation "wherein the light emitting diodes are encapsulated within the lens material" is satisfied by "the material completely encapsulating the circuit board and light emitting unit" as recited in claim 18 of the '733 reference since inherently the light emitting diodes are part of the light emitting unit thus encapsulated with the light emitting unit.

- With regards to claims 2 and 3 of the instant invention, although the '733 does not specifically disclose the circuit board defining an aperture, claim 1 of the '733 reference does recite "at least electrical leads of said electrical connection extending outwardly of said solid body to provide electrical connections for said lamp assembly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the circuit board of the '733 define an aperture since the circuit board, lens and LED's together provide a lamp assembly and the electrical leads extending outwardly of the lamp assembly would obviously have an aperture defined in the circuit board so that a power source by means of the electric leads would be connected to the circuit board to provide power to the lamp device.
- With regards to claim 6 and 7, claims 2 and 3 of the '733 reference recite the same subject matter.
- With regards to claim 8 of the instant invention, claim 4 of the '733 reference recites the same subject matter.

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- With regards to claim 9 of the instant invention, claim 8 of the '733 reference claims the subject matter.
- With regards to claim 10 of the instant invention, claims 1 and 9 and 18 of the '733 recite the same subject matter except for the recitation the material being translucent. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the material recited in the '733 to be translucent since inherently the material would need to be translucent to allow the LED's to emit light through the material. The limitation "wherein the circuit board is encapsulated within the lens material" is satisfied by "the material completely encapsulating the circuit board and light emitting unit" as recited in claim 18 of the '733 reference.
- With regards to claim 15 of the instant invention, claim 10 of the '733 reference discloses the same subject matter.
- With regards to claim 16 of the instant invention, claims 2 and 11 of the '733 reference disclose the same subject matter.
- With regards to claim 17 of the instant invention, claim 12 of the '733 reference discloses the same subject matter.
- With regards to claim 18 of the instant invention, claims 4 and 13 of the '733 reference discloses the same subject matter.
- With regards to claim 19 of the instant invention, claims 8 and 17 disclose the same subject matter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2,10,13-15,18,20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Vilanilam et al (5,821,695).

- Vilanilam discloses a support circuit board defining a plurality of extensions extending from a periphery of the board for attachment to a mold (lens 40 molds the moldable material; col. 2 lines 39-51, a snap on guard and o-ring, 28, a plurality of the LED's mounted to the circuit board (64), an electrical connection attached to the circuit board and extending outwardly of the lamp assembly ((figs 6-7), a mold in place lens material encapsulating the circuit board and light emitting diodes and formed to provide a predetermined shape for the lens assembly (col. 4 lines 5-26) the electrical connection extending outwardly of the lens assembly. Vilanilam discloses in column 4 lines 6-11 and 20-24 respectively, "This bore is used to facilitate the introduction of an encapsulating material which will completely fill all of the open spaces in the chamber defined by the cavity housing 18 and the glass jewel cavity 42. Because of the various open spaces between the frame 45 and the chamber defined by the cavities 18

and 42, the elastomer material will readily flow throughout these cavities for completely filling all interior spaces." This satisfies the limitations of "the light emitting diodes are encapsulated within the lens material" and "the circuit board is encapsulated within the lens material" since as taught by Vilanilam, all open spaces as are shown in the space defined by reference numeral 42 which includes the LED's and the circuit board, are encapsulated by the flowable material of Vilanilam. With regards to the encapsulating material of Vilanilam being a "lens material", Vilanilam discloses the encapsulating material as being optically clear with a refractive index close to glass thus satisfying the limitation of a "lens material" since the material of Vilanilam has optical characteristics.

- The circuit board defines an aperture (63);
- The lens material has at least one opening formed in it for permitting attachment of the lamp assembly to another structure (74);
- A moldable translucent material, alight emitting unit attached to a circuit board defining a plurality of extensions extending from a periphery thereof (figs 6 and 7, 50) and wherein the circuit board has been molded within the material (col. 4 lines 5-26) and a electrical leads attached to the circuit board that extend through the material to allow electrical connection to the circuit board (65,66,68);
- The Light emitting unit comprises a plurality of LED's (fig. 7);
- The circuit board comprises a plurality of apertures (63).

- With regards to method claims 20-22 the structural limitations of the method claims are anticipated by the Vilanilam reference, thus the abovementioned rejection applies

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vilanilam et al as applied to claims 1 and 10 above respectively, and further in view of Berg (6,286,986).

7. Vilanilam discloses the claimed invention except for the recitation of a reflector attached to the circuit board. Berg discloses a circuit board with LED's on it and a reflector attached to it (7). Berg also discloses a circuit board with a plurality of reflectors attached to it (7, Fig 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement reflectors attached to the circuit board of the device of Vilanilam for the purpose of providing a reflecting medium for the light sources of the device to increase the desired light output of the lighting device.

8. Claims 7,9,16,17,19 rejected under 35 U.S.C. 103(a) as being unpatentable over Vilanilam et al as applied to claims 1 and 10 above, and further in view of Deese (5,806,965).

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9. Vilanilam discloses the claimed invention except for the recitation of the LED's are positioned in rows and columns and at least a portion of the one of the rows of LED's emits a light having a color different from at least a portion of another row of LED's. Deese discloses an LED beacon light wherein the LED's are positioned and arranged in rows and columns, at least one row of LED's emits light having a color different from at least a portion of another row of LED's (fig 3, col. 2 lines 43-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of Deese's LED's structure and color scheme in the device of Vilanilam for the purpose of providing Vilanilam with a multicolored LED light device that would emit a selected light arrangement for a desired purpose such as an emergency signal such as taught by Deese.

- With regards to the recitation of the lens material withstanding a force of 30ft.lbs.per square inch, Vilanilam discloses the flowable material has the capacity to absorb the impact tests that are listed on the IEC standards without cracking the glass jewel. It would have been obvious to one of obvious skill in the art at the time the invention was made to have the lens material of Vilanilam withstand a force of 30ft.lbs.per square inch, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2nd 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

10. Applicant's arguments filed 08/19/05 have been fully considered but they are not persuasive. Applicant argues that the newly added limitation reciting that the light

emitting diodes or circuit board are encapsulated within the lens material is not taught by any of the references cite (Vilanilam, Berg or Deese). The applicant is directed to the rejections as cited above and the sections where Vilanilam discloses the internal components (i.e. circuit board, LED's) being encapsulated by the flowable material. With regards to applicants argument that the newly added limitation reciting that the light emitting diodes or circuit board are encapsulated within the lens material is not required by the '733 patent, the applicant is directed to claim 18 of the '733 patent that discloses these limitations as further explained above in the obviousness type double patenting rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

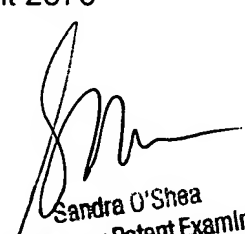
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton
Examiner
Art Unit 2875

AMT



Sandra O'Shea
Supervisory Patent Examiner
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